

SMALL LIGHTNING DISCHARGES BETWEEN THE RAINDROPS.

Mr. Fred. M. Taylor, Postmaster, Titusville, Fla., reports that on September 17, during a thundershower shortly after sunset, each electric discharge was accompanied by small typical strokes of only a few inches in length between neighboring rain drops. These were synchronous with the main discharge and when they struck the hands or face produced a sharp stinging sensation.

OLD WEATHER RECORD AT FAIRMOUNT, ONONDAGA COUNTY, N. Y.

We desire to again call attention to the record of temperature kept at Fairmount, Onondaga County, N. Y., since 1800. This record is referred to on page 296 of the Transactions of the New York State Agricultural Society for the year 1859. If any one can discover what has become of this record and see that it is made accessible to meteorologists, he will be doing a good work. Some extracts referring to this record

were published in the MONTHLY WEATHER REVIEW for September, 1897, page 398.

HURRICANE ON SEPTEMBER 11 IN THE BAHAMAS.

Mr. Arthur S. Haigh, living at Cat Cay, in the Bahamas, latitude $25^{\circ} 33'$ north; longitude $79^{\circ} 19'$ west, writes as follows:

A hurricane passed here on September 11, and there being no weather station within 60 miles or so, a few details may be of interest to the Weather Bureau. On the night of the 10th the wind was squally from east, with some rain; barometer 29.80 at 10 p. m. At 6 a. m. on the 11th barometer was at 29.50; wind a full gale from northeast, which increased to hurricane force by 8:30 a. m.; barometer 29.20 and falling rapidly. From 10 to 10:30 a. m. barometer stood at 28.82; between 10:30 and 11 a. m. the wind dropped a good deal and went round by north to southwest, from which quarter shortly after 11 a. m. it blew harder than ever; barometer slowly rising. After 1 p. m. the wind gradually decreased; by 4 p. m. barometer had risen to 29.50 and at 6 p. m. to 29.80—storm practically over.

Rainfall for twenty-four hours ending 6 p. m. September 11 was 0.84 inch. The barometer had been about two tenths below normal for several days, which is not unusual here at this time of year, but beyond that I had no warning.

THE WEATHER OF THE MONTH.

By Mr. W. B. STOCKMAN, District Forecaster, in charge of Division of Meteorological Records.

PRESSURE.

The distribution of mean atmospheric pressure is graphically shown on Chart IV and the average values and departures from normal are shown in Tables I and VI.

The mean barometric pressure was above 30.00 inches from the central parts of Texas, Oklahoma, and Kansas, southeastern Nebraska, western Iowa, northwestern Wisconsin, and central upper Michigan eastward to the Atlantic Ocean, with the crest over central North Carolina, Virginia, West Virginia, District of Columbia, Maryland, Delaware, and southern New Jersey, in which region the mean pressure was from 30.15 to 30.19 inches.

Over western New Mexico, Arizona, and eastern and the central valleys of California the mean pressure was 29.90 inches or lower, with a minimum mean monthly of 29.80 inches at Yuma.

The mean pressure was below the normal in Minnesota generally, eastern and southern South Dakota, Nebraska, western Kansas, western Texas, southern Wyoming, Colorado, New Mexico, northeastern Arizona, Utah, central Nevada, and north-central California; elsewhere it was above the normal.

In the area of minus departures the change in no instance equaled $-.05$ inch, while in the greater portion of the regions of plus departures the changes ranged from $+.05$ to $+.13$ inch, the maximum changes occurring over western Virginia and eastern West Virginia.

The pressure increased over August, 1903, except in southern Florida, northwestern upper Michigan, northern Minnesota, eastern North Dakota, and north-central Montana.

The minus departures were very slight, not exceeding $-.02$ inch. Generally the plus departures were very decided, with changes of $+.10$ inch to $+.15$ inch over portions of the northern and middle Plateau regions, and from northeastern Arkansas eastward to the Atlantic Ocean, and from eastern Missouri northeastward over the lower Lake region and thence eastward over southern New England to the Atlantic. Over eastern Kentucky, the southern parts of Ohio, Pennsylvania, and New Jersey, the District of Columbia, Maryland, Delaware, Virginia, West Virginia, and northern North Carolina the changes ranged from $+.15$ to $+.20$ inch, with the greatest change over northeastern West Virginia.

TEMPERATURE OF THE AIR.

The distribution of maximum, minimum, and average surface temperatures is graphically shown by the lines on Chart VI.

The temperature was above the normal in New England, the Ohio Valley and Tennessee, lower Lake region, and the middle and south Pacific districts, and below the normal in all other districts.

As will be seen by the subjoined table, the plus departures exceeded $+1.0^{\circ}$ in but one district, while the minus departures were -1.0° , or more, in ten districts; -2.0° , or more, in four districts; -3.0° , or more, in two districts, and -4.0° , or more, in one district.

The average temperatures for the several geographic districts and the departures from the normal values are shown in the following table:

Average temperatures and departures from normal.

Districts.	Number of stations.	Average temperatures for the current month.	Departures for the current month.	Accumulated departures since January 1.	Average departures since January 1.
New England	8	61.2	+ 0.5	+ 4.9	+ 0.5
Middle Atlantic	12	66.7	+ 0.3	+ 7.5	+ 0.8
South Atlantic	10	72.5	+ 0.8	+ 3.9	+ 0.4
Florida Peninsula *	8	78.9	+ 0.2	+ 5.8	+ 0.6
East Gulf	9	74.4	+ 1.0	+ 7.7	+ 0.9
West Gulf	7	75.2	+ 0.8	+ 11.0	+ 1.2
Ohio Valley and Tennessee	11	69.6	+ 0.8	+ 4.0	+ 0.4
Lower Lake	8	64.4	+ 1.2	+ 8.9	+ 1.0
Upper Lake	10	58.9	+ 0.3	+ 10.6	+ 1.2
North Dakota *	8	52.2	+ 4.9	+ 2.9	+ 0.3
Upper Mississippi Valley	11	64.0	+ 1.0	+ 4.0	+ 0.4
Missouri Valley	11	62.6	+ 2.6	+ 0.7	+ 0.1
Northern Slope	7	55.4	+ 2.8	+ 3.9	+ 0.4
Middle Slope	6	66.0	+ 1.7	+ 6.6	+ 0.7
Southern Slope *	6	70.9	+ 1.4	+ 10.4	+ 1.2
Southern Plateau *	12	67.2	+ 1.9	+ 13.2	+ 1.5
Middle Plateau *	8	57.8	+ 3.4	+ 24.0	+ 2.7
Northern Plateau *	12	55.7	+ 1.6	+ 0.1	0.0
North Pacific	7	57.0	+ 0.1	+ 3.6	+ 0.4
Middle Pacific	5	63.4	+ 0.5	+ 8.1	+ 0.9
South Pacific	4	68.7	+ 0.4	+ 5.1	+ 0.6

* Regular Weather Bureau and selected voluntary stations.

In Canada.—Prof. R. F. Stupart says:

The mean temperature of the month was lower than the average over the mainland of British Columbia, throughout the Northwest Territories, in Manitoba, and in Ontario north of the Great Lakes, the largest negative departure, about 6° , being in British Columbia and Saskatchewan. In the Territories, in only three of the past twenty years has the September mean been as low as during the month just closed. From Lake Huron eastward over Ontario, Quebec, and the Maritime Provinces, the mean was very nearly average, but a positive departure of about 1° was fairly general.

East of the Mississippi Valley, except in New York, about central Lake Ontario, the departures, whether plus or minus,